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## SEARCH REQUEST FORM

AUG 19 2002

Scientific and Technical Information Center

(STIC)

Requester's Full Name: GARY NICKOL Examiner #: 77581 Date: 8-19-02  
 Art Unit: 1642 Phone Number 305 7143 Serial Number: 09/853580  
 Mail Box and Bldg/Room Location: 8D17 Results Format Preferred (circle):  PAPER  DISK  E-MAIL  
8E12

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover-sheet, pertinent claims, and abstract.

Title of Invention: See attached

Inventors (please provide full names): " "

Earliest Priority Filing Date: 9-18-97

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search inventors and  
 claims 1, 18, and 21  
 (See attached)

Thank you,  
 Gary Nickol

Patent Search  
 Technicians  
 CMR 16-308-0001

## STAFF USE ONLY

Searcher: Beverly e 4994

## Type of Search

## Vendors and cost where applicable

Searcher Phone #: AA Sequence (#) STN Dialog Searcher Location: Structure (#) Questel/Orbit Date Searcher Picked Up: Bibliographic Dr. Link Date Completed: 08-22-02Litigation Lexis/Nexis Searcher Prep & Review Time: 20Fulltext Sequence Systems Clerical Prep Time: Patent Family WWW/Internet Online Time: TCOther Other (specify)

Nickol  
09/1853580

09/853580

~~FILE 'REGISTRY'~~ ENTERED AT 15:00:52 ON 22 AUG 2002

L1 5 S (TWEEN 80 OR TWEEN 20 OR ~~TWEEN 40~~ OR TWEEN 60 OR "ZWITT  
E TEEPOL HB7/CN 5

L2 1 S E2  
E "ZWITTERGENT 3-12"/CN 5

L3 1 S E3

L4 7 S L1 OR L2 OR L3

L6 3 S (POLOXAMER 401 OR "PLURONIC L62LF" OR "PLURONIC L101" O  
E "PLURONIC L62LF"/CN 5  
E "PLURONIC L 62LF"/CN 5

L7 1 S E3  
E PLURONIC L 101/CN 5

L8 1 S E3  
E PLURONIC L 64/CN 5

L9 1 S E3  
E PEG 1000/CN 5

L10 1 S E3

L11 4 S L6 OR L7 OR L8 OR L9 OR L10

L13 5 S (SQUALANE OR EICOSANE OR TETRATETRACONTANE OR PRISTANE

L16 1 S POLYSORBATE 80/CN

L26 27 S (TYROSINASE OR "N-ACETYLGLUCOSAMINYLTRANSFERASE"? OR ".  
E ".BETA.-CATENIN"/CN 5

L27 34 S ".BETA.-CATENIN"?/CN  
E "MUM-1"/CN 5  
E MAGE/CN 5

L31 2 S E3-E4  
E "CYCLIN DEPENDENT KINASES-4"/CN 5  
E "CYCLIN DEPENDENT KINASES 4"/CN 5  
E "CYCLIN-DEPENDENT KINASE 4"/CN 5

L45 2 S E3-E4  
E TRANSFORMING GROWTH FACTOR/CN

L46 140 S "TRANSFORMING GROWTH FACTOR .BETA."/CN

L47 142 S L45 OR L46

~~FILE 'HCAPLUS'~~ ENTERED AT 16:01:21 ON 22 AUG 2002

L1 5 SEA FILE=REGISTRY ABB=ON PLU=ON (TWEEN 80 OR TWEEN 20  
OR TWEEN 40 OR TWEEN 60 OR "ZWITTERGEN 3-12" OR TEEPOL  
HB7 OR SPAN 85)/CN

L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "TEEPOL HB 7"/CN

L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON "ZWITTERGENT 3-12"/CN

L4 7 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3

L5 20296 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR TWEEN(W) (80 OR 20  
OR 40 OR 60) OR ZWITTERGENT 3 12 OR TEEPOL(W) (HB 7 OR  
HB7) OR SPAN 85

L6 3 SEA FILE=REGISTRY ABB=ON PLU=ON (POLOXAMER 401 OR  
"PLURONIC L62LF" OR "PLURONIC L101" OR "PLURONIC L64" OR

PEG1000 OR TETRONIC 1501 OR TETRONIC 150R1 OR TETRONIC 701 OR TETRONIC 901 OR TETRONIC 1301 OR TETRONIC 130R1) /CN

L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 62LF"/CN  
 L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 101"/CN  
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 64"/CN  
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PEG 1000"/CN  
 L11 4 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L7 OR L8 OR L9 OR L10  
 L13 5 SEA FILE=REGISTRY ABB=ON PLU=ON (SQUALANE OR EICOSANE OR TETRATETRACONTANE OR PRISTANE OR VEGETABLE OIL)/CN  
 L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON POLYSORBATE 80/CN  
 L17 2717 SEA FILE=HCAPLUS ABB=ON PLU=ON (L5 OR L16 OR (POLYSORBA TE OR POLY SORBATE) (W) 80) AND (L11 OR POLOXAMER 401 OR PLURONIC(W) ("L62LF" OR "L101" OR "L64" OR L(W) (62LF OR 101 OR 64)) OR PEG1000 OR PEG 1000 OR TETRONIC(W) (1501 OR 150R1 OR 701 OR 901 OR 1301 OR 130R1))  
 L18 82 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND (L13 OR SQUALANE OR EICOSANE OR TETRATETRACONTANE OR TETRA(W) (TETRACONTANE OR TETRA CONTANE) OR TETRATETRA CONTANE OR PRISTANE OR VEGETABLE OIL)  
 L45 2 SEA FILE=REGISTRY ABB=ON PLU=ON ("TRANSFORMING GROWTH FACTOR"/CN OR "TRANSFORMING GROWTH FACTOR (HUMAN MELANOMA A 2058 REDUCED)"/CN)  
 L46 140 SEA FILE=REGISTRY ABB=ON PLU=ON "TRANSFORMING GROWTH FACTOR .BETA."?/CN  
 L47 142 SEA FILE=REGISTRY ABB=ON PLU=ON L45 OR L46  
 L48 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L47 OR TGFB? OR TGF OR TRANSFORM? GROWTH FACTOR)

Claim 18  
 TGFBeta

L1 5 SEA FILE=REGISTRY ABB=ON PLU=ON (TWEEN 80 OR TWEEN 20 OR TWEEN 40 OR TWEEN 60 OR "ZWITTERGENG 3-12" OR TEEPOL HB7 OR SPAN 85)/CN  
 L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "TEEPOL HB 7"/CN  
 L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON "ZWITTERGENT 3-12"/CN  
 L4 7 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3  
 L5 20296 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR TWEEN(W) (80 OR 20 OR 40 OR 60) OR ZWITTERGENT 3 12 OR TEEPOL(W) (HB 7 OR HB7) OR SPAN 85  
 L6 3 SEA FILE=REGISTRY ABB=ON PLU=ON (POLOXAMER 401 OR "PLURONIC L62LF" OR "PLURONIC L101" OR "PLURONIC L64" OR PEG1000 OR TETRONIC 1501 OR TETRONIC 150R1 OR TETRONIC 701 OR TETRONIC 901 OR TETRONIC 1301 OR TETRONIC 130R1) /CN  
 L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 62LF"/CN  
 L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 101"/CN  
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 64"/CN  
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PEG 1000"/CN  
 L11 4 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L7 OR L8 OR L9 OR L10  
 L13 5 SEA FILE=REGISTRY ABB=ON PLU=ON (SQUALANE OR EICOSANE OR TETRATETRACONTANE OR PRISTANE OR VEGETABLE OIL)/CN  
 L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON POLYSORBATE 80/CN  
 L17 2717 SEA FILE=HCAPLUS ABB=ON PLU=ON (L5 OR L16 OR (POLYSORBA TE OR POLY SORBATE) (W) 80) AND (L11 OR POLOXAMER 401 OR PLURONIC(W) ("L62LF" OR "L101" OR "L64" OR L(W) (62LF OR

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101 OR 64)) OR PEG1000 OR PEG 1000 OR TETRONIC(W) (1501  
OR 150R1 OR 701 OR 901 OR 1301 OR 130R1))  
L18 82 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND (L13 OR  
SQUALANE OR EICOSANE OR TETRATETRACONTANE OR TETRA(W) (TET  
RACONTANE OR TETRA CONTANE) OR TETRATETRA CONTANE OR  
PRISTANE OR VEGETABLE OIL)  
L23 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (ANTIGEN OR  
GP100 OR GP(W) (75 OR 100) OR MART(W) (1 OR I) OR MARTI OR  
MART1 OR GP75 OR TYRSINASE OR MELANOMA(W) (PROTEOGLYCAN  
OR PROTEO GLYCAN) OR MAGE OR BAGE OR GAGE OR RAGE OR  
ACETYGLUCOSAMIN? OR ACETYL(W) (GLUCOSAMIN? OR GLUCOS  
AMIN?))  
L24 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (CATENIN OR  
MUM1 OR MUMI OR MUM(W) (1 OR I) OR CYCLIN(1W)KINASE OR  
RAS OR BCR OR P53 OR P185 OR P(W) (53 OR 185) OR HER2 OR  
HER 2 OR EPIDERM?(1W)FACTOR OR MUCIN OR PAPILLOMAVIR? OR  
PAPILLOMA VIR? OR EBNA OR PSA OR PROSTAT?(1W)MEMBRANE OR  
PCTA#)  
L25 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (IMMUNOGLOBULIN  
OR IMMUNO GLOBULIN OR IG OR T(1W)RECEPTOR (W) IDIOTYP?  
L26 27 SEA FILE=REGISTRY ABB=ON PLU=ON (TYROSINASE OR  
"N-ACETYLGLUCOSAMINYLTRANSFERASE"? OR ".BETA.-CATENIN"  
OR "MUM-1")/CN  
L27 34 SEA FILE=REGISTRY ABB=ON PLU=ON ".BETA.-CATENIN"?/CN  
L31 2 SEA FILE=REGISTRY ABB=ON PLU=ON ("CYCLIN-DEPENDENT  
KINASE 4"/CN OR "CYCLIN-DEPENDENT KINASE 4 (RAT CLONE  
RCDK4)"/CN)  
L32 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L26 OR L27 OR  
L31 OR TYROSINASE OR ACETYLGLUCOS? OR ACETYL GLUCOS? OR  
TCR)  
L33 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR L24 OR L25 OR  
L32

claim 21  
Antigens

L49 ~~13 OR 48 OR 133~~

L49 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1999:215575 HCAPLUS  
DOCUMENT NUMBER: 130:247033  
TITLE: Synergistic composition and methods for treating  
neoplastic or cancerous growths and for  
restoring or boosting hematopoiesis  
INVENTOR(S): Hanna, Nabil; Braslawsky, Gary R.; Hariharan,  
Kandasamy  
PATENT ASSIGNEE(S): Idec Pharmaceuticals Corporation, USA  
SOURCE: PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 9913912  | A1   | 19990325 | WO 1998-US18495 | 19980917 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,<br>DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP,<br>KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,<br>MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, |      |          |                 |          |

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|  |    |                 |                 |          |
|--|----|-----------------|-----------------|----------|
| TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ,<br>MD, RU, TJ, TM  |    |                 |                 |          |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,<br>ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,<br>CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |    |                 |                 |          |
| ZA 9808461   | A  | 19990330        | ZA 1998-8461    | 19980916 |
| CA 2303178   | AA | 19990325        | CA 1998-2303178 | 19980917 |
| AU 9895658   | A1 | 19990405        | AU 1998-95658   | 19980917 |
| AU 742216  | B2 | 20011220        |                 |          |
| EP 1015031   | A1 | 20000705        | EP 1998-949313  | 19980917 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,<br>PT, IE, FI   |    |                 |                 |          |
| JP 2001516727  | T2 | 20011002        | JP 2000-511527  | 19980917 |
| NO 2000001413  | A  | 20000518        | NO 2000-1413    | 20000317 |
| US 2001018054  | A1 | 20010830        | US 2001-853580  | 20010514 |
| US 2001019715  | A1 | 20010906        | US 2001-853581  | 20010514 |
| PRIORITY APPLN. INFO.:   |    |                 |                 |          |
|  |    | US 1997-933359  | A               | 19970918 |
|  |    | WO 1998-US18495 | W               | 19980917 |

AB A method for treating neoplastic or cancerous growths and for treating cancer patients to restore or boost hematopoiesis comprises administration of a combination of a cytotoxic T-lymphocyte (CTL)-inducing compn. and a agent capable of neutralizing or down-regulating the activity of tumor-secreted immunosuppressive factors such as TGF-.beta. and IL-10, sep. or in combination. The CTL inducer is typically a vaccine for enhancing tumor immunity which lacks an immunostimulating peptide component and is formulated as a stable oil-in-water emulsion contg. a micelle-forming agent. The combination produces a synergistic enhancement of the CTL response. Since TGF-.beta. neg. regulates and/or inhibits the growth of hematopoietic cells, the treatment can improve hematopoiesis during cancer therapy. Thus, mice bearing progressively growing ovalbumin-expressing EG7 tumors showed a delay in tumor growth after treatment with 30 .mu.g ovalbumin in Provax adjuvant and 50 .mu.g anti-TGF-.beta. antibodies.

IT 111-01-3, Squalane 112-95-8,  
Eicosane 1921-70-6, Pristane  
7098-22-8, Tetratetracontane 9005-64-5,  
Tween 20 9005-65-6, Tween  
80 9005-66-7, Tween 40  
9005-67-8, Tween 60 14933-08-5  
, Zwittergent 3-12 25322-68-3  
, PEG 26266-58-0, Span 85  
106392-12-5, Poloxamer 401  
107397-59-1, Tetronic 150R1  
110617-70-4, Tetronic 130R1  
134092-79-8, Teepol HB 7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(in vaccine adjuvant; synergistic compn. and methods for treating neoplastic or cancerous growths and for restoring or boosting hematopoiesis)

IT 147014-97-9, Cyclin-dependent kinase 4  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(mutants, vaccine contg.; synergistic compn. and methods for treating neoplastic or cancerous growths and for restoring or boosting hematopoiesis)

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IT 9002-10-2, Tyrosinase 83588-90-3, N-  
Acetylglucosaminyltransferase V

RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(vaccine contg.; synergistic compn. and methods for treating  
neoplastic or cancerous growths and for restoring or boosting  
hematopoiesis)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN  
THE RE FORMAT

L49 ANSWER 2 OF 13 HCPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:58829 HCPLUS  
DOCUMENT NUMBER: 128:127067  
TITLE: Induction of cytotoxic T lymphocyte responses  
INVENTOR(S): Raychaudhuri, Syamal; Rastetter, William H.  
PATENT ASSIGNEE(S): IDEC Pharmaceuticals Corp., USA  
SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No.  
919,787.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE           | APPLICATION NO. | DATE     |
|--|------|----------------|-----------------|----------|
| US 5709860   | A    | 19980120       | US 1994-351001  | 19941207 |
| US 5585103   | A    | 19961217       | US 1992-919787  | 19920724 |
| US 5695770   | A    | 19971209       | US 1995-472311  | 19950607 |
| CA 2204738   | AA   | 19960613       | CA 1995-2204738 | 19951129 |
| WO 9617863   | A1   | 19960613       | WO 1995-US15433 | 19951129 |
| W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,<br>ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,<br>LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,<br>SD, SE, SG, SI, SK |      |                |                 |          |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR,<br>IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,<br>ML, MR, NE, SN, TD, TG   |      |                |                 |          |
| AU 9644104   | A1   | 19960626       | AU 1996-44104   | 19951129 |
| AU 699044  | B2   | 19981119       |                 |          |
| EP 801656  | A1   | 19971022       | EP 1995-942921  | 19951129 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,<br>PT, IE   |      |                |                 |          |
| BR 9509872   | A    | 19971125       | BR 1995-9872    | 19951129 |
| CN 1175260   | A    | 19980304       | CN 1995-197570  | 19951129 |
| JP 10510264  | T2   | 19981006       | JP 1995-517641  | 19951129 |
| NO 9702521   | A    | 19970806       | NO 1997-2521    | 19970603 |
| FI 9702431   | A    | 19970606       | FI 1997-2431    | 19970606 |
| LT 4308  | B    | 19980325       | LT 1997-115     | 19970704 |
| LV 11866   | B    | 19980120       | LV 1997-132     | 19970707 |
| US 6197311   | B1   | 20010306       | US 1998-24220   | 19980217 |
| US 2002039582  | A1   | 20020404       | US 2000-740003  | 20001220 |
| PRIORITY APPLN. INFO.:   |      |                |                 |          |
|  |      | US 1991-735069 | B2              | 19910725 |
|  |      | US 1992-919787 | A2              | 19920724 |
|  |      | US 1994-351001 | A1              | 19941207 |
|  |      | US 1995-476674 | B1              | 19950607 |

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WO 1995-US15433 W 19951129  
US 1997-919787 B2 19970829  
US 1998-24220 A1 19980217

AB Methods and compns. useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating peptide component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

IT 111-01-3, Squalane 112-95-8,  
Eicosane 1921-70-6, Pristane  
7098-22-8, Tetratetracontane 9005-64-5,  
Tween 20 9005-65-6, Polysorbate  
80 9005-66-7, Tween 40  
9005-67-8, Tween 60 14933-08-5  
, Zwittergent 3-12 25322-68-3  
, PEG1000 26266-58-0, Span 85  
106392-12-5, Poloxamer 401  
107397-59-1, Tetronic 150R1  
110617-70-4, Tetronic 1501  
134092-79-8, Teepol HB7  
RL: AGR (Agricultural use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(emulsion formulation contg. antigen and stabilizer and  
micelle-forming agent and biodegradable oil for induction of  
cytotoxic T lymphocyte responses for infection and cancer  
therapy)

L49 ANSWER 3 OF 13 HCPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:9866 HCPLUS  
DOCUMENT NUMBER: 126:135602  
TITLE: Induction of cytotoxic T-lymphocyte responses  
INVENTOR(S): Raychaudhuri, Syamal; Rastetter, William H.  
PATENT ASSIGNEE(S): Idec Pharmaceutical Corporation, USA  
SOURCE: U.S., 21 pp., Cont.-in-part of U.S. Ser. No.  
735,069, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| US 5585103 | A    | 19961217 | US 1992-919787  | 19920724 |
| CA 2113750 | AA   | 19930204 | CA 1992-2113720 | 19920704 |
| HU 69784   | A2   | 19950928 | HU 1994-202     | 19920724 |
| HU 220295  | B    | 20011128 |                 |          |
| IL 102639  | A1   | 19970318 | IL 1992-102639  | 19920724 |
| AT 166578  | E    | 19980615 | AT 1992-917479  | 19920724 |
| ES 2117052 | T3   | 19980801 | ES 1992-917479  | 19920724 |
| CZ 288048  | B6   | 20010411 | CZ 1994-150     | 19920724 |
| ZA 9205614 | A    | 19930420 | ZA 1992-5614    | 19920727 |

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|                        |    |          |                |             |
|------------------------|----|----------|----------------|-------------|
| US 5709860             | A  | 19980120 | US 1994-351001 | 19941207    |
| US 6270769             | B1 | 20010807 | US 1995-449728 | 19950524    |
| US 5695770             | A  | 19971209 | US 1995-472311 | 19950607    |
| US 6197311             | B1 | 20010306 | US 1998-24220  | 19980217    |
| PRIORITY APPLN. INFO.: |    |          | US 1991-735069 | B2 19910725 |
|                        |    |          | CS 1994-150    | A 19920724  |
|                        |    |          | US 1992-919787 | A 19920724  |
|                        |    |          | US 1994-351001 | A1 19941207 |
|                        |    |          | US 1995-476674 | B1 19950607 |

AB Methods and compns. useful for inducing a cytotoxic T lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the **antigen** to which the CTL response is desired and providing an **antigen** formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This **antigen** formulation is preferably lacking in an immunostimulating peptide component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

IT 111-01-3, Squalane 112-95-8,  
Eicosane 1921-70-6, Pristane  
9005-64-5, Tween 20 9005-65-6,  
Polysorbate 80 9005-66-7, Tween  
40 9005-67-8, Tween 60  
14933-08-5, Zwittergent 3-12  
25322-68-3 26266-58-0, Span 85  
106392-12-5, Pluronic L64  
110617-70-4, Tetronic 1301  
134092-79-8, Teepol hb7  
RL: PEP (Physical, engineering or chemical process); THU  
(Therapeutic use); BIOL (Biological study); PROC (Process); USES  
(Uses)  
(formulations for induction of cytotoxic T-lymphocyte responses)

L49 ANSWER 4 OF 13 HCPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:536217 HCPLUS  
DOCUMENT NUMBER: 125:192942  
TITLE: Cytokines and antibody subclass associated with protective immunity against blood-stage malaria in mice vaccinated with the C terminus of merozoite surface protein 1 plus a novel adjuvant  
AUTHOR(S): De Souza, J. Brian; Ling, Irene T.; Ogun, Sola A.; Holder, Anthony A.; Playfair, John H. L.  
CORPORATE SOURCE: Dep. of Immunology, Univ. College London Medical Sch., London, W1P 9PG, UK  
SOURCE: Infection and Immunity (1996), 64(9), 3532-3536  
CODEN: INFIBR; ISSN: 0019-9567  
PUBLISHER: American Society for Microbiology  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A blood-stage malaria **antigen** comprising the C terminus of merozoite surface protein 1 fused to glutathione S-transferase, combined with an adjuvant formulation contg. **squalane**, **Tween 80**, and pluronic L121 (AF), administered s.c. protected mice against death from a lethal Plasmodium yoelii infection. The protection induced by this **antigen**

-adjuvant combination was compared with that induced by the antigen plus saponin in terms of survival from the lethal infection and clearance of parasitemia. The levels of gamma interferon and interleukin-4 in spleens were measured as indicators of Th1 and Th2 cell activation, and antibody classes and subclasses were detd. by immunofluorescence. With a 10-.mu.g dose of antigen and AF as adjuvant, all mice recovered, but with saponin as the adjuvant, there were only a few survivors. With 30 .mu.g of antigen plus AF, the peak parasitemias were 10-fold lower than those with 10 .mu.g; with saponin, survival was slightly improved. The levels of both gamma interferon and interleukin-4 rose more rapidly and to higher levels with AF as the adjuvant than with saponin, and the same was true for IgG1, IgG2a, and IgG2b subclasses. Thus, in terms of both cytokine prodn. and antibody levels, AF is a more potent adjuvant for a malaria vaccine than is saponin.

IT 111-01-3, Squalane 9005-65-6,  
 Tween 80 106392-12-5, Pluronic L121  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (effect of vaccination with the C terminus of merozoite surface protein 1 plus a novel adjuvant on cytokines and antibody levels in mice)

L49 ANSWER 5 OF 13 HCPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1996:483722 HCPLUS  
 DOCUMENT NUMBER: 125:140546  
 TITLE: Induction of cytotoxic T-lymphocyte responses  
 INVENTOR(S): Raychaudhuri, Syamal; Rastetter, William H.  
 PATENT ASSIGNEE(S): Idec Pharmaceuticals Corporation, USA  
 SOURCE: PCT Int. Appl., 72 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 9617863  | A1   | 19960613 | WO 1995-US15433 | 19951129   |
| W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK |      |          |                 |            |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
| US 5709860  | A    | 19980120 | US 1994-351001  | 19941207   |
| AU 9644104  | A1   | 19960626 | AU 1996-44104   | 19951129   |
| AU 699044   | B2   | 19981119 |                 |            |
| EP 801656   | A1   | 19971022 | EP 1995-942921  | 19951129   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE   |      |          |                 |            |
| BR 9509872  | A    | 19971125 | BR 1995-9872    | 19951129   |
| JP 10510264   | T2   | 19981006 | JP 1995-517641  | 19951129   |
| NO 9702521  | A    | 19970806 | NO 1997-2521    | 19970603   |
| FI 9702431  | A    | 19970606 | FI 1997-2431    | 19970606   |
| PRIORITY APPLN. INFO.:  |      |          | US 1994-351001  | A 19941207 |

09/853580

US 1991-735069 B2 19910725  
US 1992-919787 A2 19920724  
WO 1995-US15433 W 19951129

AB Methods and compns. useful for inducing a cytotoxic T-lymphocyte response (CTL) in a human or domesticated or agriculturally important animal. The method includes the steps of providing the antigen to which the CTL response is desired and providing an antigen formulation which comprises, consists, or consists essentially of two or more of a stabilizing detergent, a micelle-forming agent, and an oil. This antigen formulation is preferably lacking in an immunostimulating peptide component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. This formulation is provided as a stable oil-in-water emulsion.

IT 111-01-3, Squalane 112-95-8,  
Eicosane 1921-70-6, Pristane  
7098-22-8, Tetratetracontane 9005-64-5,  
Tween 20 9005-65-6, Polysorbate  
80 9005-66-7, Tween 40  
9005-67-8, Tween 60 14933-08-5  
, Zwittergent 3-12 25322-68-3  
26266-58-0, Span 85 106392-12-5  
, Poloxamer 401 107397-59-1,  
Tetronic 150R1 110617-70-4,  
Tetronic 1301 134092-79-8,  
Teepol HB7

RL: MOA (Modifier or additive use); USES (Uses)  
(compn. contg. antigen and detergent and  
micelle-forming agent and oil for induction of cytotoxic T  
lymphocyte)

L49 ANSWER 6 OF 13 HCPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:2559 HCPLUS

DOCUMENT NUMBER: 124:97440

TITLE: A novel adjuvant for use with a blood-stage  
malaria vaccine

AUTHOR(S): De Souza, J. B.; Playfair, J. H. L.

CORPORATE SOURCE: Medical School, University College London,  
London, W1P 9PG, UK

SOURCE: Vaccine (1995), 13(14), 1316-19

CODEN: VACCDE; ISSN: 0264-410X

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An effective vaccine delivery system has been developed for  
vaccination against a blood-stage malaria infection in mice. S.c.  
vaccination with a semi-purified asexual blood-stage malaria  
antigen combined with an adjuvant formulation contg.

squalane, Tween 80, and pluronic L121  
(AF) protected mice infected with a lethal Plasmodium yoelii  
infection against death and greatly reduced the severity and  
duration of parasitemia. The adjuvant and the route of immunization  
are both clin. acceptable, thereby making this an attractive  
delivery system for a human malaria vaccine. Protective immunity  
appeared to be assocd. with an enhancement of both Th1 and Th2  
subset cytokines.

IT 111-01-3, Squalane 9005-65-6,  
Tween 80 106392-12-5, Pluronic L121

09/853580

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(novel adjuvant for use with blood-stage malaria vaccine)

L49 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1995:874953 HCAPLUS  
DOCUMENT NUMBER: 123:296634  
TITLE: Convertible microemulsion formulations  
INVENTOR(S): Owen, Albert J.; Yiv, Seang H.; Sarkahian, Ani  
B.  
PATENT ASSIGNEE(S): Ibah, Inc., USA  
SOURCE: U.S., 32 pp. Cont.-in-part of U.S. Ser. No.  
841,931, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE        |
|------------------------|------|----------|-----------------|-------------|
| US 5444041             | A    | 19950822 | US 1992-885202  | 19920520    |
| CA 2108266             | AA   | 19921020 | CA 1992-2108266 | 19920415    |
| AT 183099              | E    | 19990815 | AT 1992-911731  | 19920415    |
| IL 101613              | A1   | 19980222 | IL 1992-101613  | 19920416    |
| CN 1066183             | A    | 19921118 | CN 1992-102762  | 19920418    |
| US 5633226             | A    | 19970527 | US 1995-425787  | 19950420    |
| US 5646109             | A    | 19970708 | US 1995-425475  | 19950420    |
| US 5688761             | A    | 19971118 | US 1995-406862  | 19950608    |
| PRIORITY APPLN. INFO.: |      |          |                 |             |
|                        |      |          | US 1991-687691  | B2 19910419 |
|                        |      |          | US 1992-837347  | B2 19920214 |
|                        |      |          | US 1992-841931  | B2 19920225 |
|                        |      |          | WO 1992-US3086  | A 19920415  |
|                        |      |          | US 1992-885202  | A1 19920520 |
|                        |      |          | US 1992-963326  | B2 19921016 |
|                        |      |          | WO 1993-US9933  | W 19931015  |

AB There is provided a water-in-oil (w/o) microemulsion which readily converts to an oil-in-water (o/w) emulsion by the addn. of aq. fluid to the w/o microemulsion, whereby any water-sol. biol.-active material in the aq. phase is released for absorption by the body. The w/o microemulsion is particularly useful for storing proteins and the like for long periods of time at room temp. and above until they are ready for use, at which time the addn. of aq. fluid converts the microemulsion to an o/w emulsion and releases the protein. For example, a w/o microemulsion base for the delivery of His-D-Trp-Ala-Trp-D-Phe-Lys-NH<sub>2</sub> was formulated contg. Captex 200 68.3, Capmul MCM 8.3, Centrophase 31 (lecithins) 1.6, Cremophor EL 16.5, and water 5.3%.

IT 9005-65-6, Tween 80 25322-68-3

, Polyethylene glycol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(convertible microemulsion formulations for biol. active proteins)

L49 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1995:755189 HCAPLUS  
DOCUMENT NUMBER: 123:141186  
TITLE: The induction of cytotoxic T cells and tumor regression by soluble antigen

09/853580

AUTHOR(S): formulation  
Hariharan, Kandasamy; Braslawsky, Gary; Black,  
Amelia; Raychaudhuri, Syamal; Hanna, Nabil  
CORPORATE SOURCE: IDEC Pharmaceuticals, San Diego, CA, 92121, USA  
SOURCE: Cancer Res. (1995), 55(16), 3486-9  
CODEN: CNREA8; ISSN: 0008-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB CTLs specific for tumor **antigens** play a major role in the immunity against cancer. We have shown that class I-restricted CTLs can be induced by injecting sol. **antigens** mixed in an **antigen** formulation (AF) that consists of **squalane**, **Tween 80**, and **Pluronic L121** (S. Raychaudhuri et al., 1992). In this study, using ovalbumin and the ovalbumin-expressing transfectoma (EG7) as a tumor model system, we examd. the *in vivo* antitumor effect of **antigen**-AF mixt. Vaccination of mice with ovalbumin in AF 2 or 3 days after EG7 tumor challenge showed significant inhibition of tumor growth compared to mice vaccinated with ovalbumin in alum or in saline. Depletion of CD8+ cells at the time of immunization completely abrogated the AF-induced tumor protection, indicating that CD8+ T cells are the major effectors in tumor protection *in vivo*. Depletion of CD4+ cells led to a marginal loss of tumor protection, which may be the result of inhibition of ovalbumin-specific CTL response due to the lack of T-helper activity. Our results demonstrate that AF can be used in subunit vaccines to stimulate CTLs and tumor regression *in vivo*.

IT 111-01-3, **Squalane 9005-65-6**,  
**Tween 80 106392-12-5**, **Pluronic L121**  
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cytotoxic T cells and tumor regression induction by sol. **antigen** formulation contg.)

L49 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1993:415331 HCAPLUS  
DOCUMENT NUMBER: 119:15331  
TITLE: Convertible microemulsion formulations  
INVENTOR(S): Owen, Albert J.; Yiv, Seang H.; Sarkahian, Ani B.  
PATENT ASSIGNEE(S): Affinity Biotech, Inc., USA  
SOURCE: PCT Int. Appl., 102 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 9218147   | A1   | 19921029 | WO 1992-US3086  | 19920415 |
| W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD                              |      |          |                 |          |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG |      |          |                 |          |
| CA 2108266   | AA   | 19921020 | CA 1992-2108266 | 19920415 |
| AU 9218966   | A1   | 19921117 | AU 1992-18966   | 19920415 |
| AU 668509  | B2   | 19960509 |                 |          |

09/853580

|   |    |          |                |          |
|---|----|----------|----------------|----------|
| EP 580778   | A1 | 19940202 | EP 1992-911731 | 19920415 |
| EP 580778   | B1 | 19990811 |                |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE |    |          |                |          |
| JP 06507172   | T2 | 19940811 | JP 1992-511743 | 19920415 |
| AT 183099   | E  | 19990815 | AT 1992-911731 | 19920415 |
| ES 2136620  | T3 | 19991201 | ES 1992-911731 | 19920415 |
| IL 101613   | A1 | 19980222 | IL 1992-101613 | 19920416 |
| CN 1066183  | A  | 19921118 | CN 1992-102762 | 19920418 |
| US 5633226  | A  | 19970527 | US 1995-425787 | 19950420 |
| US 5646109  | A  | 19970708 | US 1995-425475 | 19950420 |
| US 1991-687691 A 19910419                                     |    |          |                |          |
| US 1992-837347 A 19920214                                     |    |          |                |          |
| US 1992-841931 A 19920225                                     |    |          |                |          |
| WO 1992-US3086 A 19920415                                     |    |          |                |          |
| US 1992-885202 A1 19920520                                    |    |          |                |          |

PRIORITY APPLN. INFO.:

AB A phase-reversible (convertible) water-in-oil (w/o) microemulsion comprises up to .apprx.60 vol.% of internally dispersed aq. phase contg. a drug (e.g. protein, peptide, immunogen), .apprx.5-99 vol.% of an oily phase (e.g. diesters of propylene glycol), and .apprx.1-70 vol.% of a surfactant with HLB value of 7-14. Addn. of aq. soln. converts the microemulsion to an o/w emulsion which releases the protein. Thus, Captex 200 870.0, polyoxyethylene (50) sorbitol hexaoleate 50.0, Cremophor EL 50.0, and saline soln. 30.0.mu.L were mixed at 25.degree. to provide a clear w/o microemulsion. Water was then added to the total compn. in the ratio of 4:1 (vol./vol.) to convert the microemulsion to the o/w emulsion.

IT 9005-65-6, Tween 80 25322-68-3  
, Polyethylene glycol  
RL: BIOL (Biological study)  
(microemulsions contg., convertible water-oil)

L49 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1993:219835 HCAPLUS.  
DOCUMENT NUMBER: 118:219835  
TITLE: Emulsion compositions and methods for induction  
of cytotoxic T-lymphocyte (CTL) responses  
INVENTOR(S): Raychaudhuri, Syamal; Rastetter, William H.  
PATENT ASSIGNEE(S): Idec Pharmaceuticals Corp., USA  
SOURCE: PCT Int. Appl., 56 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 9301831   | A1   | 19930204 | WO 1992-US6193  | 19920724 |
| W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP,<br>KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US |      |          |                 |          |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE, BF,<br>BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG            |      |          |                 |          |
| CA 2113750   | AA   | 19930204 | CA 1992-2113720 | 19920704 |
| AU 9224338   | A1   | 19930223 | AU 1992-24338   | 19920724 |
| AU 666127  | B2   | 19960201 |                 |          |
| EP 596032  | A1   | 19940511 | EP 1992-917479  | 19920724 |
| EP 596032  | B1   | 19980527 |                 |          |

|   |    |                |                |          |
|---|----|----------------|----------------|----------|
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE |    |                |                |          |
| JP 06509344   | T2 | 19941020       | JP 1992-503071 | 19920724 |
| BR 9206310  | A  | 19950425       | BR 1992-6310   | 19920724 |
| HU 69784  | A2 | 19950928       | HU 1994-202    | 19920724 |
| HU 220295   | B  | 20011128       |                |          |
| IL 102639   | A1 | 19970318       | IL 1992-102639 | 19920724 |
| AT 166578   | E  | 19980615       | AT 1992-917479 | 19920724 |
| ES 2117052  | T3 | 19980801       | ES 1992-917479 | 19920724 |
| RU 2129439  | C1 | 19990427       | RU 1994-38046  | 19920724 |
| RO 116459   | B1 | 20010228       | RO 1994-94     | 19920724 |
| ZA 9205614  | A  | 19930420       | ZA 1992-5614   | 19920727 |
| NO 9400218  | A  | 19940325       | NO 1994-218    | 19940121 |
| FI 9400335  | A  | 19940324       | FI 1994-335    | 19940124 |
| FI 2001001187   | A  | 20010605       | FI 2001-1187   | 20010605 |
| PRIORITY APPLN. INFO.:  |    | US 1991-735069 | A2 19910725    |          |
|   |    | WO 1992-US6193 | A 19920724     |          |

AB Compns. and methods are disclosed for inducing a CTL response in a human or domesticated or agriculturally important animal. The method includes the steps of providing the **antigen** to which the CTL response is desired and providing an **antigen** formulation which comprises, consists, or consists essentially of .gtoreq.2 of a stabilizing detergent, a micelle-forming agent, and an oil. The **antigen** formulation is preferably lacking in an immunostimulating peptide component, or has sufficiently low levels of such a component that the desired CTL response is not diminished. The formulation is provided as a stable oil-in-water emulsion. The components of the emulsion are chosen such that the emulsion will remain in an emulsion state for .ltoreq.1 mo, preferably >1 yr, without phase sepn. Thus, mice were injected with ovalbumin with an **antigen** formulation (AF) of squalene-Pluronic L121-**Tween 80**, and spleen cells from the immunized mice were tested against EG7-ova cells (an ovalbumin-expressing EL4 transfected). A significant transfectant-specific CTL response was shown. Ovalbumin-AF-primed effector cells also lysed untransfected EL4 cells coated with ovalbumin fragment 253-276, but did not lyse EL4 cells coated with a myelin basic protein fragment. The CTL effectors were shown to be CD8+ T-cells. The effect of substitutions in the three-component AF system was detd., as was the effect of two-component systems (e.g. squalene-**Tween 80**). Use of the AF in producing class I-restricted CTL priming by sol. gp120 of human immunodeficiency virus is also described, as are AF components necessary for antibody prodn.

IT 111-01-3 9005-65-6, **Tween 80**  
106392-12-5

RL: BIOL (Biological study)  
(**antigen**-emulsion compn. with, cytotoxic T-lymphocyte induction in relation to)

L49 ANSWER 11 OF 13 HCPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1992:172259 HCPLUS  
DOCUMENT NUMBER: 116:172259  
TITLE: Adjuvants and vaccines containing Pluronics and lipopolysaccharides  
INVENTOR(S): Hunter, Robert L.; Takayama, Kuni K.  
PATENT ASSIGNEE(S): Emory University, USA  
SOURCE: PCT Int. Appl., 87 pp.  
CODEN: PIXXD2

09/853580

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 9200101  | A1   | 19920109 | WO 1991-US4716  | 19910627 |
| W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU |      |          |                 |          |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG    |      |          |                 |          |
| CA 2086097  | AA   | 19911228 | CA 1991-2086097 | 19910627 |
| AU 9182861  | A1   | 19920123 | AU 1991-82861   | 19910627 |
| AU 655593   | B2   | 19950105 |                 |          |
| CN 1060027  | A    | 19920408 | CN 1991-105280  | 19910627 |
| EP 536302   | A1   | 19930414 | EP 1991-913213  | 19910627 |
| EP 536302   | B1   | 19970827 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE   |      |          |                 |          |
| BR 9106601  | A    | 19930420 | BR 1991-6601    | 19910627 |
| JP 05507498   | T2   | 19931028 | JP 1991-512657  | 19910627 |
| JP 08032639   | B4   | 19960329 |                 |          |
| AT 157259   | E    | 19970915 | AT 1991-913213  | 19910627 |
| ES 2104712  | T3   | 19971016 | ES 1991-913213  | 19910627 |
| US 5554372  | A    | 19960910 | US 1995-420333  | 19950411 |
| PRIORITY APPLN. INFO.:  |      |          | US 1990-544831  | 19900627 |
|   |      |          | US 1991-716807  | 19910621 |
|   |      |          | US 1986-909964  | 19860922 |
|   |      |          | US 1987-75187   | 19870716 |
|   |      |          | US 1988-208335  | 19880617 |
|   |      |          | US 1989-341315  | 19890421 |
|   |      |          | US 1989-449086  | 19891208 |
|   |      |          | WO 1991-US4716  | 19910627 |
|   |      |          | US 1993-133760  | 19931007 |

AB An improved immunol. adjuvant comprises a surface-active copolymer HO(C<sub>2</sub>H<sub>4</sub>O)<sub>b</sub>(C<sub>3</sub>H<sub>6</sub>O)<sub>a</sub>(C<sub>2</sub>H<sub>4</sub>O)<sub>b</sub>H (I), wherein the mol. wt. of the hydrophobe (C<sub>3</sub>H<sub>6</sub>O) is 4500-9000 and the percentage of hydrophile (C<sub>2</sub>H<sub>4</sub>O) is 3-15 wt.%, and/or a nontoxic lipopolysaccharide from Rhodopseudomonas. This adjuvant intensifies the immune response to an **antigen** or a vaccine and may also change the predominant isotype of antibody produced. Thus, an oil-in-water emulsion was prep'd. contg. 2% **squalane** in phosphate-buffered saline (pH 7.4) contg. trinitrophenyl ovalbumin (antigen), **Tween 80** (emulsifier), I (adjuvant), and [(C<sub>3</sub>H<sub>6</sub>O)<sub>b</sub>(C<sub>2</sub>H<sub>4</sub>O)<sub>a</sub>]<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>N[(C<sub>2</sub>H<sub>4</sub>O)<sub>a</sub>(C<sub>3</sub>H<sub>6</sub>O)<sub>b</sub>]<sub>2</sub> (a = 5, b = 32) (II). The combination of I and II gave a synergistic adjuvant effect.

IT 106392-12-5, Pluronic  
RL: BIOL (Biological study)  
(vaccine adjuvant contg.)

L49 ANSWER 12 OF 13 HCPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1989:560235 HCPLUS  
DOCUMENT NUMBER: 111:160235  
TITLE: Vaccines comprising polyoxypropylene-polyoxyethylene block polymer based adjuvants  
INVENTOR(S): Allison, Anthony C.; Byars, Noelene E.  
PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA

09/853580

SOURCE: U.S., 10 pp. Cont.-in-part of U.S. 4,606,918.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| US 4772466  | A    | 19880920 | US 1985-703791  | 19850221 |
| US 4606918  | A    | 19860819 | US 1983-525190  | 19830822 |
| DK 8404006  | A    | 19850223 | DK 1984-4006    | 19840821 |
| DK 167173   | B1   | 19930913 |                 |          |
| AU 8432251  | A1   | 19850228 | AU 1984-32251   | 19840821 |
| AU 578907   | B2   | 19881110 |                 |          |
| JP 60105630 | A2   | 19850611 | JP 1984-174861  | 19840821 |
| JP 06017314 | B4   | 19940309 |                 |          |
| ZA 8406504  | A    | 19860326 | ZA 1984-6504    | 19840821 |
| IL 72740    | A1   | 19880229 | IL 1984-72740   | 19840821 |
| CA 1236017  | A1   | 19880503 | CA 1984-461465  | 19840821 |
| US 4933179  | A    | 19900612 | US 1985-703837  | 19850221 |
| US 4770874  | A    | 19880913 | US 1986-859665  | 19860505 |
| JP 06065097 | A2   | 19940308 | JP 1993-203231  | 19930817 |
| JP 2557603  | B2   | 19961127 |                 |          |

PRIORITY APPLN. INFO.: US 1983-525190 19830822

OTHER SOURCE(S): MARPAT 111:160235

AB A vaccine contains an immunolog. effective amt. of an antigen, a multiphase-forming amt. of a polyoxypropylene-polyoxyethylene block polymer, a glycol ether-based surfactant, an immunopotentiating amt. of an immunostimulating glycopeptide, and buffered isoosmotic saline in a quantity sufficient to make vol. Feline leukemia virus vaccine was prep'd. from an adjuvant comprising a soln. A 84.5, soln. B 0.5, squalane 10.0, and Pluronic L-121 5.0%, wherein the soln. A contained NaCl 80.0, KCl 2.0, KH<sub>2</sub>PO<sub>4</sub> 2.0, Na<sub>2</sub>HPO<sub>4</sub>·7H<sub>2</sub>O 21.6g, Tween 80 40.0 mL, and distd. water to 10,000 mL, and the soln. B contained N-acetylmuranyl-L-threonyl-D-isoglutamine 0.6g and the soln. A. 50.0 mL. Two doses of the vaccine were administered to cats 5 and 2 wk prior to an infection with feline leukemia virus by the nasal route and blood samples were tested for viral antigens in the blood by indirect fluorescent antibody techniques and for p27 antigens by ELISA; the use of the above adjuvant significantly increased the protection of the cats when compared to an Al hydroxide gel/Quil A adjuvant.

IT 9005-65-6, Tween 80

RL: BIOL (Biological study)  
(vaccine adjuvants contg. polyoxypropylene-polyoxyethylene block copolymer and immunostimulating glycopeptides and)

IT 106392-12-5, Pluronic L-121

RL: BIOL (Biological study)  
(vaccine adjuvants contg. surfactants and immunostimulating glycopeptides and)

L49 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1988:498633 HCAPLUS

DOCUMENT NUMBER: 109:98633

TITLE: The development of an adjuvant formulation that elicits cell-mediated and humoral immune

responses to virus subunit and other  
antigens

AUTHOR(S): Allison, Anthony C.; Byars, Neolene E.  
CORPORATE SOURCE: Inst. Biol. Sci., Syntex Res., Palo Alto, CA,  
94304, USA  
SOURCE: Prog. Leukocyte Biol. (1987), 6(Immunopharmacol.  
Infect. Dis.), 191-201  
CODEN: PLBIE5; ISSN: 0884-6790

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB N-Acetylmuramyl-L-threonyl-p-isoglutamine ([Thr1]MDP) was selected as an adjuvant with sepn. of adjuvant activity from side effects such as pyrogenicity, capacity to induce uveitis and arthritis, and to increase resistance to infections. Pluronic L121, squalane and Tween 80 were used with the adjuvant to produce a 2-phase system with antigens concd. at the interphase. This formulation is esp. useful for vaccines based on recombinant DNA technol.

IT 9005-65-6, Tween 80 106392-12-5

, Pluronic L121

RL: BIOL (Biological study)

(immune adjuvant formulation contg. muramyldipeptide deriv. and, for vaccines)

(FILE: MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, STCST-EPLUS, JAPIO, CANCERLIT' ENTERED AT 16:04:55 ON 22 AUG 2002)

L1 5 SEA FILE=REGISTRY ABB=ON PLU=ON (TWEEN 80 OR TWEEN 20 OR TWEEN 40 OR TWEEN 60 OR "ZWITTERGENG 3-12" OR TEEPOL HB7 OR SPAN 85)/CN

L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "TEEPOL HB 7"/CN

L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON "ZWITTERGENT 3-12"/CN

L4 7 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3

L5 20296 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR TWEEN(W) (80 OR 20 OR 40 OR 60) OR ZWITTERGENT 3 12 OR TEEPOL(W) (HB 7 OR HB7) OR SPAN 85

L6 3 SEA FILE=REGISTRY ABB=ON PLU=ON (POLOXAMER 401 OR "PLURONIC L62LF" OR "PLURONIC L101" OR "PLURONIC L64" OR PEG1000 OR TETRONIC 1501 OR TETRONIC 150R1 OR TETRONIC 701 OR TETRONIC 901 OR TETRONIC 1301 OR TETRONIC 130R1)/CN

L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 62LF"/CN

L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 101"/CN

L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 64"/CN

L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PEG 1000"/CN

L11 4 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L7 OR L8 OR L9 OR L10

L13 5 SEA FILE=REGISTRY ABB=ON PLU=ON (SQUALANE OR EICOSANE OR TETRATETRACONTANE OR PRISTANE OR VEGETABLE OIL)/CN

L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON POLYSORBATE 80/CN

L17 2717 SEA FILE=HCAPLUS ABB=ON PLU=ON (L5 OR L16 OR (POLYSORBA TE OR POLY SORBATE) (W) 80) AND (L11 OR POLOXAMER 401 OR PLURONIC(W) ("L62LF" OR "L101" OR "L64" OR L(W) (62LF OR 101 OR 64)) OR PEG1000 OR PEG 1000 OR TETRONIC(W) (1501 OR 150R1 OR 701 OR 901 OR 1301 OR 130R1))

L18 82 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND (L13 OR SQUALANE OR EICOSANE OR TETRATETRACONTANE OR TETRA(W) (TETRACONTANE OR TETRA CONTANE) OR TETRATETRA CONTANE OR PRISTANE OR VEGETABLE OIL)

L45 2 SEA FILE=REGISTRY ABB=ON PLU=ON ("TRANSFORMING GROWTH FACTOR"/CN OR "TRANSFORMING GROWTH FACTOR (HUMAN MELANOMA A 2058 REDUCED)"/CN)  
 L46 140 SEA FILE=REGISTRY ABB=ON PLU=ON "TRANSFORMING GROWTH FACTOR .BETA."?/CN  
 L47 142 SEA FILE=REGISTRY ABB=ON PLU=ON L45 OR L46  
 L48 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L47 OR TGFB?  
 L50 1 SEA FILE=REGISTRY ABB=ON PLU=ON L18 AND (L47 OR TGFB?  
 L50 1 SEA FILE=REGISTRY ABB=ON PLU=ON L48

L1 5 SEA FILE=REGISTRY ABB=ON PLU=ON (TWEEN 80 OR TWEEN 20 OR TWEEN 40 OR TWEEN 60 OR "ZWITTERGENG 3-12" OR TEEPOL HB7 OR SPAN 85)/CN  
 L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "TEEPOL HB 7"/CN  
 L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON "ZWITTERGENT 3-12"/CN  
 L4 7 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3  
 L5 20296 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR TWEEN(W)(80 OR 20 OR 40 OR 60) OR ZWITTERGENT 3 12 OR TEEPOL(W)(HB 7 OR HB7) OR SPAN 85  
 L6 3 SEA FILE=REGISTRY ABB=ON PLU=ON (POLOXAMER 401 OR "PLURONIC L62LF" OR "PLURONIC L101" OR "PLURONIC L64" OR PEG1000 OR TETRONIC 1501 OR TETRONIC 150R1 OR TETRONIC 701 OR TETRONIC 901 OR TETRONIC 1301 OR TETRONIC 130R1)/CN  
 L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 62LF"/CN  
 L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 101"/CN  
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PLURONIC L 64"/CN  
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON "PEG 1000"/CN  
 L11 4 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L7 OR L8 OR L9 OR L10  
 L13 5 SEA FILE=REGISTRY ABB=ON PLU=ON (SQUALANE OR EICOSANE OR TETRATETRACONTANE OR PRISTANE OR VEGETABLE OIL)/CN  
 L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON POLYSORBATE 80/CN  
 L17 2717 SEA FILE=HCAPLUS ABB=ON PLU=ON (L5 OR L16 OR (POLYSORBA TE OR POLY SORBATE)(W)80) AND (L11 OR POLOXAMER 401 OR PLURONIC(W)( "L62LF" OR "L101" OR "L64" OR L(W)(62LF OR 101 OR 64)) OR PEG1000 OR PEG 1000 OR TETRONIC(W)(1501 OR 150R1 OR 701 OR 901 OR 1301 OR 130R1))  
 L18 82 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND (L13 OR SQUALANE OR EICOSANE OR TETRATETRACONTANE OR TETRA(W)(TETRACONTANE OR TETRA CONTANE) OR TETRATETRA CONTANE OR PRISTANE OR VEGETABLE OIL)  
 L23 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (ANTIGEN OR GP100 OR GP(W)(75 OR 100) OR MART(W)(1 OR I) OR MARTI OR MART1 OR GP75 OR TYRSINASE OR MELANOMA(W)(PROTEOGLYCAN OR PROTEO GLYCAN) OR MAGE OR BAGE OR GAGE OR RAGE OR ACETYGLUCOSAMIN? OR ACETYL(W)(GLUCOSAMIN? OR GLUCOSAMIN?))  
 L24 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (CATENIN OR MUM1 OR MUMI OR MUM(W)(1 OR I) OR CYCLIN(1W)KINASE OR RAS OR BCR OR P53 OR P185 OR P(W)(53 OR 185) OR HER2 OR HER 2 OR EPIDERM?(1W)FACTOR OR MUCIN OR PAPILLOMAVIR? OR PAPILLOMA VIR? OR EBNA OR PSA OR PROSTAT?(1W)MEMBRANE OR PCTA#)  
 L25 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (IMMUNOGLOBULIN OR IMMUNO GLOBULIN OR IG OR T(1W)RECEPTOR)(W)IDIOTYP?

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L26 27 SEA FILE=REGISTRY ABB=ON PLU=ON (TYROSINASE OR  
"N-ACETYLGLUCOSAMINYLTRANSFERASE"? OR ".BETA.-CATENIN"  
OR "MUM-1")/CN  
L27 34 SEA FILE=REGISTRY ABB=ON PLU=ON ".BETA.-CATENIN"?/CN  
L31 2 SEA FILE=REGISTRY ABB=ON PLU=ON ("CYCLIN-DEPENDENT  
KINASE 4"/CN OR "CYCLIN-DEPENDENT KINASE 4 (RAT CLONE  
RCDK4)"/CN)  
L32 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L26 OR L27 OR  
L31 OR TYROSINASE OR ACETYLGLUCOS? OR ACETYL GLUCOS? OR  
TCR)  
L33 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR L24 OR L25 OR  
L32  
L36 4 SEA L33

=> s 150 or 136  
~~L51~~ 4 L50 OR L36

=> dup rem 151  
PROCESSING COMPLETED FOR L51  
~~L52~~ 4 DUP REM L51 (0 DUPLICATES REMOVED)

L52 ANSWER 1 OF 4 WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER: 1999-357351 [30] WPIDS  
DOC. NO. CPI: C1999-105653  
TITLE: New immunogenic compositions for treating cancer or  
virus or parasite infection.  
DERWENT CLASS: A96 B04 D16  
INVENTOR(S): BRASLAWSKY, G R; HANNA, N; HARIHARAN, K; HARIHARA,  
K  
PATENT ASSIGNEE(S): (IDEC-N) IDEC PHARM CORP  
COUNTRY COUNT: 84  
PATENT INFORMATION:

| PATENT NO     | KIND   | DATE               | WEEK | LA | PG |
|---------------|--|--------------------|------|----|----|
| WO 9913912    | A1   | 19990325 (199930)* | EN   | 41 |    |
| RW:           | AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC<br>MW NL OA PT SD SE SZ UG ZW  |                    |      |    |    |
| W:            | AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI<br>GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT<br>LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL<br>TJ TM TR TT UA UG UZ VN YU ZW |                    |      |    |    |
| ZA 9808461    | A  | 19990630 (199931)  |      | 36 |    |
| AU 9895658    | A  | 19990405 (199933)  |      |    |    |
| EP 1015031    | A1   | 20000705 (200035)  | EN   |    |    |
| R:            | AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE   |                    |      |    |    |
| NO 2000001413 | A  | 20000518 (200035)  |      |    |    |
| CN 1279616    | A  | 20010110 (200128)  |      |    |    |
| US 2001018054 | A1   | 20010830 (200151)  |      |    |    |
| US 2001019715 | A1   | 20010906 (200154)  |      |    |    |
| KR 2001024109 | A  | 20010326 (200161)  |      |    |    |
| JP 2001516727 | W  | 20011002 (200172)  |      | 32 |    |
| AU 742216     | B  | 20011220 (200208)  |      |    |    |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|-------------|------|
|-----------|------|-------------|------|

Searcher : Shears 308-4994

09/853580

|               |            |                 |          |
|---------------|------------|-----------------|----------|
| WO 9913912    | A1         | WO 1998-US18495 | 19980917 |
| ZA 9808461    | A          | ZA 1998-8461    | 19980916 |
| AU 9895658    | A          | AU 1998-95658   | 19980917 |
| EP 1015031    | A1         | EP 1998-949313  | 19980917 |
|               |            | WO 1998-US18495 | 19980917 |
| NO 2000001413 | A          | WO 1998-US18495 | 19980917 |
|               |            | NO 2000-1413    | 20000317 |
| CN 1279616    | A          | CN 1998-811280  | 19980917 |
| US 2001018054 | A1 Cont of | US 1997-933359  | 19970918 |
|               |            | US 2001-853580  | 20010514 |
| US 2001019715 | A1 Div ex  | US 1997-933359  | 19970918 |
|               |            | US 2001-853581  | 20010514 |
| KR 2001024109 | A          | KR 2000-702864  | 20000317 |
| JP 2001516727 | W          | WO 1998-US18495 | 19980917 |
|               |            | JP 2000-511527  | 19980917 |
| AU 742216     | B          | AU 1998-95658   | 19980917 |

FILING DETAILS:

| PATENT NO     | KIND | PATENT NO      |            |
|---------------|------|----------------|------------|
| AU 9895658    | A    | Based on       | WO 9913912 |
| EP 1015031    | A1   | Based on       | WO 9913912 |
| JP 2001516727 | W    | Based on       | WO 9913912 |
| AU 742216     | B    | Previous Publ. | AU 9895658 |
|               |      | Based on       | WO 9913912 |

PRIORITY APPLN. INFO: US 1997-933359 19970918; US 2001-853580  
20010514; US 2001-853581 20010514

AN 1999-357351 [30] WPIDS

AB WO 9913912 A UPAB: 19990802

NOVELTY - New immunogenic compositions for treating cancer or virus or parasite infection comprise a combination of **antigen** formulation and an agent capable of neutralizing or down-regulating immunosuppressive factors.

DETAILED DESCRIPTION - A composition (A) comprises:

(a) an admixture comprising a cancer, viral or parasitic **antigen** expressed by cancer, virally or parasitic infected cells and a microfluidized **antigen** formulation (MAF) (formulated as a stable oil-in-water emulsion), the **antigen** formulation comprising:

(i) a stabilizing detergent;  
(ii) a micelle-forming agent; and  
(iii) a biodegradable and biocompatible oil; and  
(b) at least one agent which is capable of neutralizing or down-regulating the activity of immunosuppressive factors.

INDEPENDENT CLAIMS are also included for the following:

(1) a method of treatment which includes the induction of a cytotoxic T-lymphocyte (CTL) response where the improvement comprises:

(a) the administration of an adjuvant which induces a CTL response; and  
(b) the administration of an antagonist of an immunosuppressive factor, where the administration of adjuvant and antagonist is effected sequentially or concurrently, and in any order;  
(2) a method of restoring or boosting hematopoiesis comprising administering to a patient:

(a) an admixture as in (A) (a) which is administered to the patient to induce a CTL response in the patient which is specific for the viral or cancer **antigen** contained in the admixture; and

(b) at least one agent which is capable of neutralizing or down regulating the activity of tumor and host secreted immunosuppressive factors, where the admixture and the agent are administered separately or in combination, and in any order;

(3) a composition comprising an admixture as in (A) (a) and one or more **transforming growth factor** (TGF) beta antagonists;

(4) treatment of neoplastic or cancerous growths, comprising:

(a) administration of an admixture comprising a cancer or tumor **antigen** expressed by the cancer cells and a MAF (described above); and

(b) administration of at least one agent which is capable of neutralizing or down-regulating the activity of tumors and host secreted immunosuppressive factors. The admixture is administered in an amount sufficient to induce a cytotoxic T-lymphocyte response in the patient which is specific for the cancer or tumor **antigen** contained in the admixture.

ACTIVITY - Antitumor; Antiviral; Antiparasitic.

MECHANISM OF ACTION - Induction of a cytotoxic T-lymphocyte response.

USE - The methods can be used for restoring or boosting hematopoiesis (claimed). They can be used for treating cancers, e.g. breast cancer, brain cancer, cervical cancer, leukemia, lymphoma, prostate cancer, skin cancer, bladder cancer, kidney cancer, myeloma, colorectal cancer, or endometrial cancer, viral infections e.g. **papillomavirus**, hepatitis, herpes, cytomegalovirus, respiratory syncytial virus or HIV, or parasitic infection, e.g. malaria (claimed). The agent which is capable of neutralizing or down-regulating the activity of immunosuppressive factors enhances the efficacy of tumor/viral vaccines.

ADVANTAGE - The combinations of the **antigen** compositions and antagonists of immunosuppressive agents results in a synergistic enhancement of CTL response, thereby resulting in enhanced therapeutic response against targeted **antigen** -expressing cells.

Dwg.0/4

L52 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1997:539321 BIOSIS

DOCUMENT NUMBER: PREV199799838524

TITLE: **Antigen** formulation for recombinant cancer vaccines.

AUTHOR(S): Hanna, Nabil; Black, Amelia; Hariharan, Kandasamy

CORPORATE SOURCE: IDEC Pharm. Corp., 11011 Torreyana Rd., San Diego, CA 92121 USA

SOURCE: International Journal of Oncology, (1997) Vol. 11, No. SUPPL., pp. 924.

Meeting Info.: 2nd World Congress on Advances in Oncology Athens, Greece October 16-18, 1997

ISSN: 1019-6439.

DOCUMENT TYPE: Conference; Abstract

LANGUAGE: English

L52 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

09/853580

ACCESSION NUMBER: 1995:440683 BIOSIS  
DOCUMENT NUMBER: PREV199598454983  
TITLE: The Induction of Cytotoxic T Cells and Tumor Regression by Soluble **antigen** Formulation.  
AUTHOR(S): Hariharan, Kandasamy (1); Braslawsky, Gary; Black, Amelia; Raychaudhuri, Syamal; Hanna, Nabil  
CORPORATE SOURCE: (1) IDEC Pharmaceuticals Corporation, 11011 Torreyana Road, San Diego, CA 92121 USA  
SOURCE: Cancer Research, (1995) Vol. 55, No. 16, pp. 3486-3489.  
ISSN: 0008-5472.

DOCUMENT TYPE: Article  
LANGUAGE: English

AB CTLs specific for tumor **antigens** play a major role in the immunity against cancer. We have shown that class I-restricted CTLs can be induced by injecting soluble **antigens** mixed in an **antigen** formulation (AF) that consists of **squalane**, **Tween 80**, and Pluronic L121 (S. Raychaudhuri et al., Proc. Natl. Acad. Sci. USA, 89: 8308-8312, 1992). In this study, using ovalbumin and the ovalbumin-expressing transfectoma (EG7) as a tumor model system, we examined the *in vivo* antitumor effect of **antigen**-AF mixture. Vaccination of mice with ovalbumin in AF 2 or 3 days after EG7 tumor challenge showed significant inhibition of tumor growth compared to mice vaccinated with ovalbumin in alum or in saline. Depletion of CD8+ cells at the time of immunization completely abrogated the AF-induced tumor protection, indicating that CD8+ T cells are the major effectors in tumor protection *in vivo*. Depletion of CD4+ cells led to a marginal loss of tumor protection, which may be the result of inhibition of ovalbumin-specific CTL response due to the lack of T-helper activity. Our results demonstrate that AF can be used in subunit vaccines to stimulate CTLs and tumor regression *in vivo*.

L52 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
ACCESSION NUMBER: 1987:462907 BIOSIS  
DOCUMENT NUMBER: BA84:108347  
TITLE: ADJUVANT FORMULATION FOR USE IN VACCINES TO ELICIT BOTH CELL-MEDIATED AND HUMORAL IMMUNITY.  
AUTHOR(S): BYARS N E; ALLISON A C  
CORPORATE SOURCE: INST. BIOL. SCI., SYNTEX RES., 3401 HILLVIEW AVE., PALO ALTO, CALIF. 94304.  
SOURCE: VACCINE, (1987) 5 (3), 223-228.  
CODEN: VACCDE. ISSN: 0264-410X.

FILE SEGMENT: BA; OLD  
LANGUAGE: English

AB Adjuvant formulations which elicit both humoral and cell-mediated immunity will be required for vaccines based on peptides, viral and bacterial subunits and genetically engineered **antigens**. This report describes an adjuvant formulation which increases both cell-mediated and humoral immunity and is free of significant side effects encountered with other adjuvants or vehicles. The components include the threonyl analogue of muramyl dipeptide, **Tween 80**, Pluronic L121 and **squalane**. This formulation was found to be effective with several **antigens**, in several species, including rodents, cats and monkeys. These results suggest that the formulation will be useful for both human and veterinary vaccines.

09/853580

FILE 'HOME' ENTERED AT 16:16:23 ON 22 AUG 2002

Searcher : Shears 308-4994